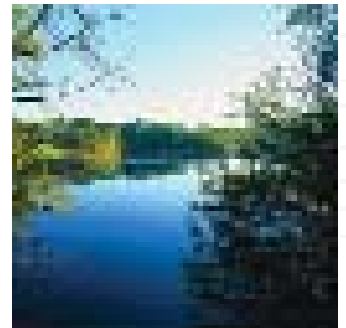
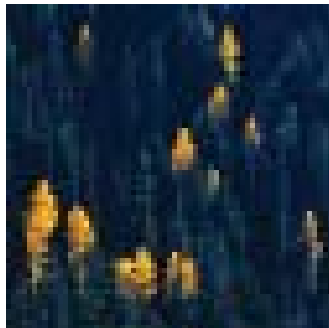
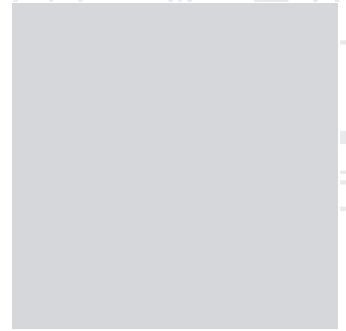
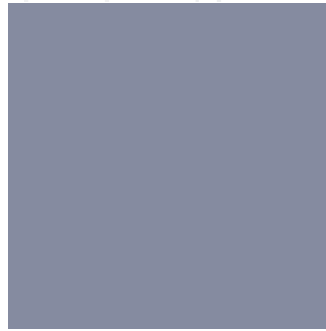




**ELECTRONIC MATERIALS**



# **Environmental Health and Safety Report** :: Marlborough Facility



## the **convergence** of materials and innovation

Rohm and Haas Electronic Materials is a world leader in developing innovative material solutions for the electronic and optoelectronic industries. Focused on the circuit board, semiconductor and advanced packaging industries, our products, technologies and solutions are vital elements in creating and producing electronic devices. Everyday, we bring inspiration, science, responsible care for our environment, technology and innovation together for people around the globe. We drive the convergence of materials and innovation.

At Rohm and Haas Electronic Materials we are committed to using the breadth of our portfolio, the talent of our people, and our unparalleled ability to serve customers regardless of geography. We respond quickly to the most demanding challenges, bringing you dynamic technologies and products, exactly when and where you need them.

**Environmental Health and Safety  
Report Objective** ::: To provide our key stakeholders with EHS information regarding Rohm and Haas Electronic Materials' Marlborough facility. Prepared in 2004, results are achieved against our 2003 EHS objectives and targets.





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# From the CEO



This year's Annual Environmental Health and Safety (EHS) Report marks an exciting transition in our company's growth and evolution. In early 2004, we changed our name to Rohm and Haas Electronic Materials. While our name has changed, our core values, to protect the health and safety of our members, our stakeholders, and the environment, remain steadfast.

As we look back at 2003, significant accomplishments were made to strengthen the Electronic Materials business on many fronts. Our world-wide safety performance closed 2003 with an OII rate of 0.5 as compared with an OII rate of 1.0 in 2002. With our focused safety efforts and vigilance in our belief that all injuries are avoidable, our zero-injury workplace objective is within close reach.

We continue our solid performance in environmental protection at the Marlborough facility by exceeding all four of our EPA Performance Track commitments. We delivered excellent results in water and electrical conservation programs. We also realized significant reductions in our use of cleaning solvents and hazardous waste generation in our Microelectronic Technologies operations. While we are proud of our accomplishments, we foresee greater challenges ahead in the area of sustainable development and must stay focused on:

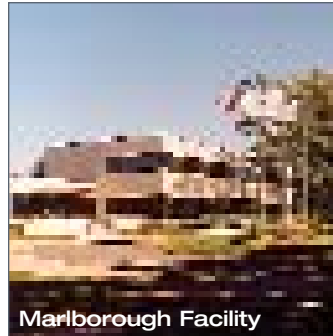
- Preserving our right to operate in our communities
- Reducing our costs and liabilities by exploring cleaner processes
- Enhancing our customer loyalty with continuous improvements in product stewardship

In the year ahead, as the global electronics industry begins to recover, we will implement innovative solutions that combine profitability with sustainability. With all business units working together, we will build the most successful and unparalleled Rohm and Haas Electronic Materials business ever.

*Blanchard*

# Facility Overview

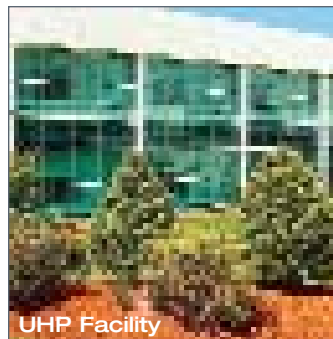
The Marlborough facility is Rohm and Haas Electronic Materials' largest manufacturing site worldwide and corporate headquarters for the Rohm and Haas Electronic Materials business. Our 110-acre site operates 24 hours a day, seven days per week, and is the workplace of approximately 700 members. The facility manufactures products for Circuit Board Technologies, Microelectronic Technologies and Packaging and Finishing Technologies. The Marlborough site also has the largest Research and Development staff for the company. Other operations at the Marlborough site include raw material and finished-product warehousing, applications laboratories, clean rooms, a pilot plant, an ultra-high-purity manufacturing facility (UHP), and a new Advanced Technology Center (ATC).



Marlborough Facility



Pilot Plant



UHP Facility



Advanced Technology Center

## Company Profile

### Rohm and Haas Electronic Materials

#### Coming together accelerates the convergence of materials and innovation

Shipley Company and Rodel have changed their names to Rohm and Haas Electronic Materials. The two industry pioneers have decided to adopt the same name to bolster recognition of our collective market leadership and, in turn, to accelerate future growth for our customers and ourselves. The new name also is expected to foster internal technology collaboration and increase operational efficiency and speed to market while, at the same time, meeting customer roadmaps. Concurrently, our four powerful, agile, independent business units have acquired new names to represent the distinct market segments that we serve.

- **Circuit Board Technologies**::: creating solutions for an evolving electronic world by providing materials and fabrication services for the global circuit board market, including metallization, imaging, embedded passives and optoelectronics.
- **CMP Technologies**::: creating the flawless surfaces required to make faster and more powerful semiconductor chips with our polishing pads, slurries, reactive chemical solutions, conditioners and other leading-edge products.
- **Microelectronic Technologies**::: using the science of materials, the power of collaboration with partners, customers and colleagues to harness advances in lithography and, in turn, improve the speed and power of semiconductor devices. Our products include 248 nm and 193 nm photoresists, anti-reflection coatings and aqueous-based developers.
- **Packaging and Finishing Technologies**::: linking innovation to performance by delivering integrated materials and surface finishing processes in electronics, optoelectronics and industrial applications. Reliable interconnects for electronic packaging, EMI shielding and corrosion resistance are just a few examples.

# Health, Safety and Environment Policy



**Policy Statement :::** We are committed to making our worldwide operations and products free from significant risks to the health and safety of our members, customers, contractors, the general public, and to the environment.

**Definitions :::** Significant risk is any risk that:

- is greater than that embodied in law, regulation, or generally accepted codes of good practice;
- is greater than that for comparable activities within the Company;
- the Company is not reasonably assured that those assuming the risk are informed;
- or, Company activities or products are likely to significantly damage the company's relationship with its members or the community.

**Management Commitment :::** We commit to provide safe workplaces and to protect member health and the environment. This commitment is communicated to members and the community. Marlborough site management commits resources in order to:

- Comply with all applicable health, safety and environmental regulations, as well as all internal policies and procedures.
- Manage our business in accordance with the Responsible Care® Guiding Principles and the Codes of Management Practice.
- Pursue pollution prevention programs that make sound economic and environmental sense.

**Measurement :::** We maintain systems to measure and evaluate safety, health, and environmental performance and to identify areas for continuous improvement in each of these areas. We annually set objectives and targets that support our business and operational strategies and demonstrate continual environmental improvement. We conduct audits to assist management in assessing compliance with the safety, health, and environmental laws, regulations, policies, and procedures applicable to the company's operations and products.

**Member Participation and Accountability :::** We provide opportunities for members to participate in the process of improving the safety, health, and environmental performance of company operations. Each member is responsible for maintain-

ing a safe and healthful workplace and for protecting the environment in accordance with his or her job duties. Each member is held accountable for adherence to Environmental, Health, and Safety (EHS) procedures.

**Member Training :::** Members are provided with the information and training needed to protect themselves, their co-workers, and the environment from potential hazards associated with company operations.

**Management of Change :::** New or significantly changed processes, products, and their intended applications are reviewed for safety, health, and environmental risks prior to introduction or implementation.

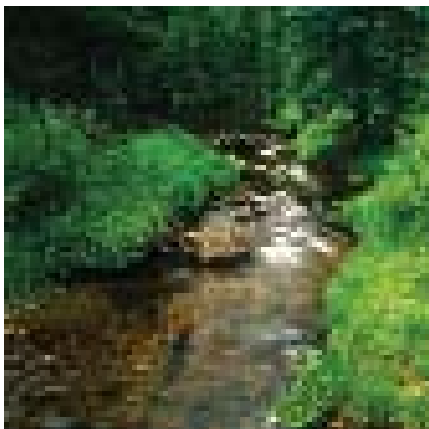
**Operating Hazards :::** We assess the hazards associated with our operations and identify any potential risks by conducting a hazard analysis. We modify operations to reduce risks to the lowest feasible level, taking into account technical and economic factors. We have emergency response and contingency plans in place to address potential incidents.

**Member Health :::** We provide programs to assist members in maintaining good health.

**Contractor :::** We require our contractors to provide their members working at company locations the same level of safety and health protection and information as we provide our members. All contractors must complete an EHS Orientation before they are allowed to work on-site.

**Pollution Prevention and Sustainable Development :::** Our products and processes are developed, designed, and managed to reduce any harmful environmental effects. We strive to efficiently utilize energy and natural resources.

**Product Risk :::** We assess and reduce to acceptable levels the potential risks of our products under known and intended uses. We inform our customers and users of known product hazards and provide them with appropriate precautionary information via our Material Safety Data Sheet, Technical Data Sheet and/or Process Manual.



# Environmental Commitment

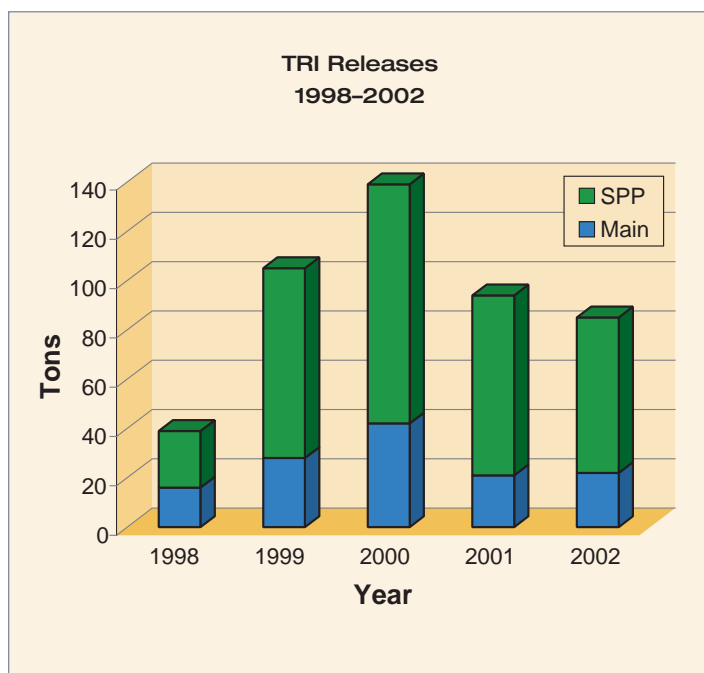
Our commitment is to reduce waste and produce the highest quality products without adversely impacting the quality of air, water, or land in our community. When waste cannot be reduced at the point of generation, reuse and recycling of materials will be explored and implemented wherever feasible. We are committed to:

- Meeting or exceeding compliance with all applicable environmental regulations.
- Pursuing waste reduction programs that can reduce our present and future environmental liabilities.
- Implementing cost-effective solutions that make sound economic and environmental sense.
- Maintaining an Environmental Management System (EMS) compliant with the ISO 14001 standard.
- Managing our business in accordance with Responsible Care® Guiding Principles and the Codes of Management Practice.

## Toxic Release Inventory

The Emergency Planning and Community Right-to-Know Act (EPCRA) Section 313 requires EPA and each state to annually collect data on releases and transfers of certain toxic chemicals from industrial facilities, and make the data available to the public in the Toxics Release Inventory (TRI). Every July the Marlborough site reports on our environmental releases to all media for regulated substances. In calendar year 2002, our total federal reportable releases to air, water, and off-site treatment facilities were 86 tons, down 13% from 2001. This downward trend in environmental releases is one that we will strive to continue. Releases to the air and water from this site were less than 5 tons per year. The remaining releases were substances that were shipped off-site to be recycled, recovered for energy, or treated by other methods, such as incineration.

The majority of our releases come from our pilot plant (SPP). The SPP processes are experimental and variable, which makes the waste generated from them a challenge to manage. Our pollution prevention programs remain focused on the SPP to drive reductions in releases from these operations.





# National Environmental Performance Track



The EPA Performance Track program is designed to recognize and encourage facilities that have a sustained record of compliance, employ environmental management systems (EMS), and are committed to continue improvements in environmental performance. This voluntary program defines what it means to be a top environmental performer and provides incentives to motivate further improvements. To participate in the program, a facility must demonstrate past environmental achievement and commit to four environmental improvements over a three-year time period. The companies in the program must also complete an annual report that outlines their progress on achieving their established environmental targets.

Rohm and Haas Electronic Materials' Marlborough facility was part of the first group of companies selected by the EPA to participate in the Performance Track program in late 2000. Our three-year participation was complete as of December 2003 and we do plan on renewing our application to continue in this program. The following table outlines our progress on our goals for reporting year 2003:

Aspect	Base Year	Target 2003 (from base year)	2003 Results
Water	1999	5%	65%
Energy	2000	5%	30%
Hazardous Substance	1999	20%	40%
Hazardous Waste (wastewater)	2000	42%	64%

We exceeded all our projected reductions on all four environmental aspects! We have plans to continue our reduction efforts for these environmental aspects even though we have made significant progress during the last three years.

## Resource Conservation

Nearly 8 million tons of solid waste is generated by households, businesses and institutions across Massachusetts. More than one-third of this waste material is recycled or composted but the remaining material is burned in incinerators (known as municipal waste combustors), buried in lined landfills or transported to out-of-state disposal facilities. Businesses are responsible for over 4.5 million of the 8 million tons of waste generated in the Commonwealth each year. Reducing commercial waste is a major priority for our state as well as for Rohm and Haas Electronic Materials. The Marlborough site continues to do its part by recycling many waste materials. Recycling makes good environmental and economic sense for our business.

The recycling totals for calendar year 2003 are as follows:

- 5.4 tons of copper laminate
- 0.4 tons of fluorescent bulbs
- 11 tons of paper
- 39,000 steel and plastic containers
- 130 tons of cardboard
- 524,000 lbs. of solvent\*

Recycling these waste streams means less waste going to combustion facilities and landfills, as well as reduced environmental liability for Rohm and Haas Electronic Materials.

\*In 2003, the Marlborough facility expanded our "Waste-to-Product" program. We started with one product that has an end use as a roofing material and added another solvent product that is used in a solvent wash blend. Because the quality of our spent solvents exceeds many quality specifications for virgin materials, external companies are able to use our spent cleaning solvents as a raw materials for their products. Our new "products" resulted in over 524,000 pounds of solvent being reused in product and not incinerated as hazardous waste.



# ISO 14001 Certification

Rohm and Haas Electronic Materials' Marlborough facility was certified to the ISO 14001 EMS standard on October 1, 1998. In September 2003, we had our fifth annual surveillance audit by our registrar, TUV America. For the fifth consecutive year, the audit found no non-conformities to the ISO 14001 standard.

An important part of an EMS is determining how the activities, products and services at a facility can significantly impact the environment. The term used to describe these sources is a "significant environmental aspect." The Marlborough facility has completed a comprehensive review of our activities, products and services. We use the following criteria to determine if an aspect is significant:

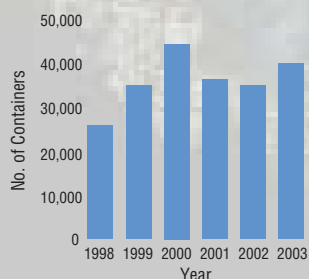
- Regulatory requirements (federal, state and local)
- Health/physical hazards
- Volume/quantity of wastes
- Public perception
- Natural resource consumption
- Financial impact
- Professional judgment

Based on the criteria listed above, the following are the significant environmental aspects at the Marlborough facility:

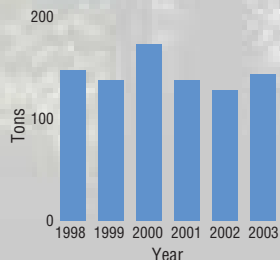
- Emissions to Air
- Hazardous Materials Management (EPA and DEP substances)
- Wastewater Discharges
- Resource Use (Energy, Water)
- Stormwater Management
- Transportation
- Waste Management (Hazardous Waste, Solvent Recycling)



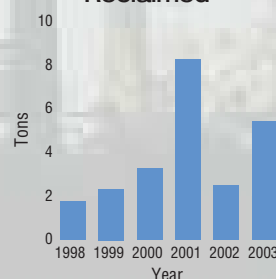
**Container Recycling**



**Paper and Cardboard Recycling**



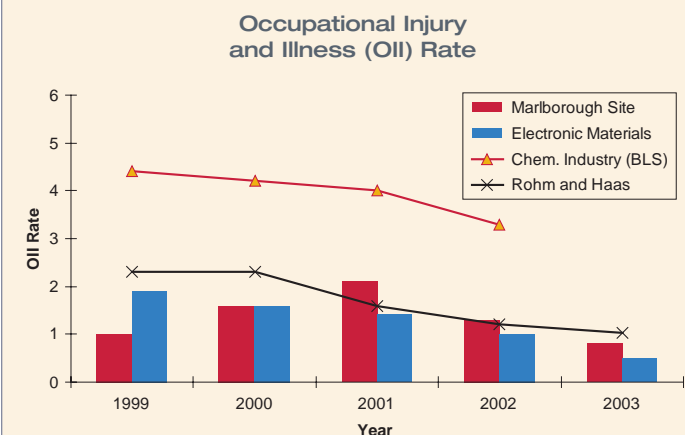
**Copper Laminate Reclaimed**



# Health and

**Occupational Injury and Illness Rates :::** The Occupational Injury and Illness (OII) rate is a results measure that serves as a downstream indicator of a company's safety performance. The rate, as specified by the Bureau of Labor Statistics, measures the number of recordable injuries or illnesses per total number of man-hours worked. This rate is standardized against 200,000 man-hours—which is an approximation of the number of hours worked by 100 workers in one year. The company's numerous safety programs, such as hazard assessments and behavioral-based safety, should lead to a reduction in unsafe behaviors, total incidents, and injury rates.

The year 2003 saw a continuation in the reduction of the OII Incident Rate. The Marlborough site experienced an overall rate of 0.8, its best ever. Our goal, however, remains one of an injury-free workplace by continuously improving our safety and health programs.



**Basic Hazard Awareness Training :::** A review of prior years' safety-related incidents revealed that hazard awareness was a strong contributor to many incidents at the Marlborough site. Employees involved in safety incidents sometimes did not recognize the existence of a given hazard and thus did not take appropriate action to prevent or mitigate its effects. As a result, hazard awareness training is now being offered to employees in such subjects as electrical hazards, ergonomics, and flammable liquids management. The training has increased safety awareness and has been instrumental in identifying and eliminating hazards at the site. The training program is based on the U.S. Occupational Safety and Health Administration (OSHA) Outreach Program and has been extensively customized to meet the needs of the Marlborough site. A future goal is to train all employees and develop a similar comprehensive hazard awareness training program for new employees and contractors.

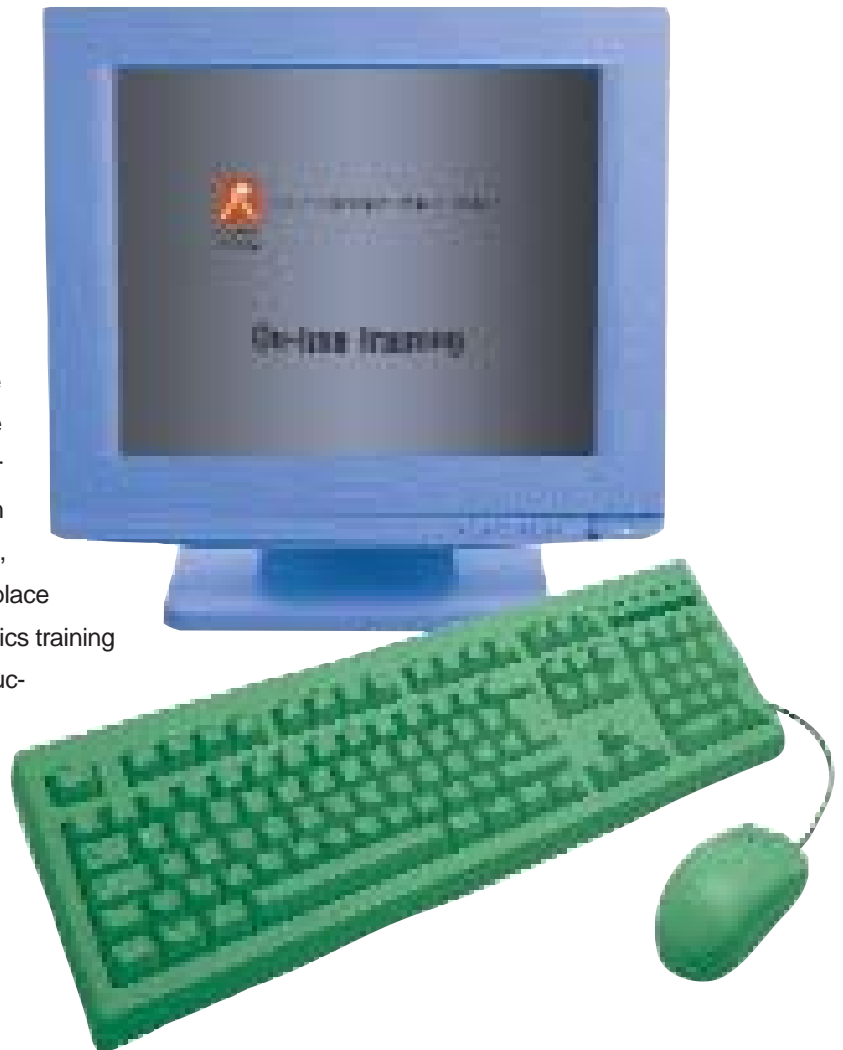
**Behavior-Based Safety :::** We continue to work toward the goal of providing an injury-free workplace. The Marlborough site has instituted a behavioral-based safety audit program. This type of program focuses on identifying and correcting a primary cause of safety-related incidents—unsafe behaviors. Reducing the underlying precursor behaviors at the Marlborough facility has contributed to our improved workplace safety program performance. Addressing the contribution of human behavior to workplace safety complements the traditional approach of focusing on workplace “conditions.” The Marlborough site is continuing to analyze behavioral-based safety audit results in developing action plans to address any unsafe behaviors.

# Safety

**EHS Training :::** Training supports a safe and healthful workplace by disseminating information and reinforcing corporate values, including those for occupational health and safety. Both traditional methods (such as live, instructor-led training) and internet-based training are used to meet this need. In this approach, EHS training presentations are developed locally and posted to a host Internet site. Training presentations are then available for registered users 24 hours a day, 7 days a week and each course can be completed at each trainee's own pace. During 2003, the increased ability to deliver training resulted in more than 50 individual EHS training sessions.

**Workplace Safety—Ergonomics :::** Again in 2003, the Marlborough site was awarded a competitive grant for more than \$11 thousand from the Commonwealth of Massachusetts for ergonomic training and workplace evaluations. A local ergonomic contractor was funded through the grant to provide ergonomic hazard awareness training and workplace surveys. A survey conducted jointly by the contractor and internal company resources has resulted in an extensive redesign of a major manufacturing area, greatly reducing ergonomic risks in that area. Workplace reviews, workplace behavioral safety audits, ergonomics training as an element of process hazards analysis, are reducing ergonomic factors that can be associated with workplace injuries.

**First Line Leader Training :::** As a complement to behavior-based safety and hazard awareness training, the site initiated First Line Leader Safety training for supervisory personnel. This training is focused on safety accountability, hazard analysis, safety incentives and incident investigation. The training is also used to introduce supervisors to the safety “tools” and resources available to them in meeting their safety management responsibilities.



# Community Outreach 2003

**United Way :::** Each year our Rohm and Haas Electronic Materials sites give their employees the opportunity to make contributions to non-profit organizations in our local community through the United Way. Not only do our individual employees contribute but Rohm and Haas Electronic Materials also makes a corporate contribution. Our campaign in Marlborough resulted in more than \$88 thousand for the United Way from the Company

and our employees. In 2003, for the second year in a row, the Marlborough location participated in the Backpack-to-School program where 70 local school children were provided with backpacks filled with school supplies.

**Evening of Giving :::** The Marlborough location has been a major sponsor of The Evening of Giving for the last four years. This event benefits the Marlborough/Hudson Homeless Shelter. We purchase 100 tickets and distribute them to our employees. The event is held in a local hotel with food supplied by local restaurants.

**Boys and Girls Clubs of MetroWest :::** For the past several years, Rohm and Haas Electronic Materials has been a major contributor to the Boys and Girls Clubs of MetroWest. In 2003, employees put themselves to work at the Marlborough Club location to clean up and paint a room that will be used by local dentists providing free dental care to area youth. Rohm and Haas Electronic Materials' Marlborough location also hosted a 5K Road Race for the third consecutive year on Thanksgiving Day. The race is a fundraiser for health prevention programs for teenagers at the Club's Marlborough, Hudson and Framingham locations.

**Holiday Hopes Program :::** A Marlborough employee has coordinated the annual Holiday Hopes Program with the

The Marlborough location continues to participate in and sponsor events benefiting the local community. The partnerships we have built are a great source of pride and help strengthen our relationship with our local community. Here are some examples of how Rohm and Haas Electronic Materials and its Marlborough employees have made a difference in this community:

Marlborough Community Services organization for the last six years. The ages and holiday wishlists of children are provided and employees purchase the listed items for the children they have selected. Each year we bring more children into the program and each year the generosity of our Marlborough employees continues to grow.

**Canned Food and Blood Drives :::** During 2003, Rohm and Haas Electronic Materials

members donated 165 pints of blood to the MetroWest Hospital Blood Donor Program. Since the inception of this program in 1992, our Marlborough members have donated more than 1,340 pints of blood.

We also held several canned food drives at the Marlborough location this year. The canned food drive resulted in approximately 2,000 pounds of food items donated by our employees. All of these items were donated to the Marlborough Community Services organization that operates the local food pantry.

**Local School Systems :::** We have sponsored events at four local high schools, Algonquin, Assabet Valley, Hudson, and Marlborough. From two scholarships to graduating seniors, to post-prom parties, we strive to make a difference in the lives of area youth. Several Marlborough employees spent a morning at a local grade school, reading in classrooms. Our employees have participated in the Reading Is Fun (RIF) program for several years. We continue to sponsor the "For the Inspiration and Recognition of Science and Technology" (FIRST) program at Algonquin Regional High School in Northborough that involves both active employee participation and financial support. Over 50 students from Hudson High School visited the Marlborough site for two events: Job Shadow Day and a Women in Technology and Science program. Both of these programs were very successful for the students and employees who participated.

# Protection of our Members and the Community

**The Marlborough Emergency Response Team (ERT)** is a dedicated group of individuals from many different departments at the Marlborough facility. Trained to the Hazardous Materials Technician, Specialist and Incident Commander levels, they undergo several hours of rigorous training and exercises each year to maintain a superior level of emergency preparedness at the Marlborough facility.

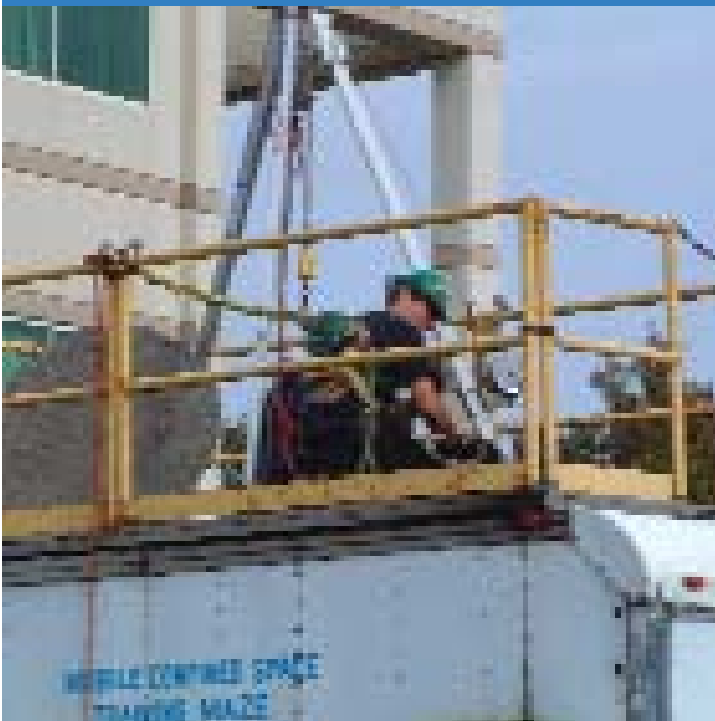
In 2003, the Marlborough ERT further expanded its training program to include a special fall protection and rescue program. The intent of this program is to supplement our Confined Space Rescue program, through awareness of suspension trauma and in-depth fall protection training.



**Fall Protection and Rescue (FPR)** is a program for the training of ERT members who support Rohm and Haas Electronic Materials' Confined Space Entry and Elevated Work permit programs. The FPR training program includes:

- Phases of fall protection
  - Fall Arrest
  - Suspension
  - Rescue
- ANSI and OSHA standards of protection
- Types of fall protection
- Fall arrest and anchor systems
- Fall protection equipment
- Rescue procedures

Classroom instruction is followed by rescue drills using a FPR simulator. The simulator is equipped with a boom, harness and other retrieval devices which enable an ERT member to gain valuable experience in FPR.



## 2003 Environmental, Health and Safety

# Objectives and Targets

The Marlborough facility has been formally setting EHS objectives and targets for the past six years. The table below outlines some the EHS objectives and targets that were established for calendar year 2003, and the associated results.

Objectives and Targets	Results Achieved
Reduce work-related injuries and illness. OII target rate of 0 for Electronic Materials Business worldwide.	The 2003 OII rate for the Marlborough facility was 0.8, our best ever. The Rohm and Haas Electronic Materials worldwide rate was 0.5, a significant improvement from last year's rate of 1.0.
Comply with all applicable health, safety, and environmental regulations. Receive no violations or penalties from regulatory agencies.	All required reports were submitted and the Marlborough facility received no violations or penalties from any regulatory agency in 2003.
Receive no significant findings during the ISO 14001 annual surveillance audit.	There were no significant findings found during our ISO 14001 audits.
Develop a project plan to deploy SAP Waste Module by May 2003.	The SAP Waste Module allows for uniform data tracking of waste materials throughout the Rohm Haas Business Units. The Waste Module was deployed on target and is currently being used by the Marlborough site.
Continual improvements in EHS computer based training modules for a maintaining a well-trained workforce.	More than 40 Computer Based Training (CBT) modules were posted via an internet site for EHS training. Department-specific hazardous waste training modules were developed for more effective training. CBTs allow members to complete training any time, day or night at their own pace.
Provide members, customers, and community stakeholders with EHS information on the Marlborough facility and demonstrate our commitment to Responsible Care® by preparing an annual environmental report.	The EHS Annual Environmental Report was distributed to all North American EM members, key customers, EM organizations overseas, and to local community officials.
Determine a technically feasible and cost-effective technology to reduce wastewater generated in the pilot plant by 40%.	Separation technologies and water re-use options continue to be evaluated. We are pilot testing reverse osmosis and biological treatment technologies. Our goal is to recycle the majority of process wastewater back to the process at the pilot plant.
Meet all of EPA Performance Track targets for waste, water, energy and hazardous materials use:	All targets were exceeded for all environmental aspects.
Reduce cleaning solvent usage in Microelectronics by 20% and hazardous wastewater shipped off-site by 42%.	The following reductions against baseline were achieved: Cleaning solvent – 41% Water use – 69% Hazardous waste (wastewater) – 64% Electricity – 31%
Reduce water use in PWB Manufacturing and reduce electrical consumption site-wide by 5%.	



# Sustainable Development

*The following sustainability elements integrated throughout Rohm and Haas will help drive progress and establish global growth initiatives that are sustainable into the twenty-first century:*

## **Balanced Scorecard :::**

Support and continually strengthen Rohm and Haas' commitment to satisfy all key stakeholder groups all of the time.

## **Top Line Growth :::**

Support strategies that are central to Rohm and Haas around the world.

**Excellence in Product Stewardship :::** Continuously improve the safety and environmental impact of our processes, products and services.

**Risk Characterization**—Characterize on a dynamic basis new and existing products with respect to risk using all credible scientific data.

**Life-Cycle Understanding and Management**—Characterize and manage how the products and production processes of chemistry contribute to, or adversely impact, the environment and society through the product lifecycle.

## **Excellence in Environmental Health and Safety :::**

Maintain worldwide operations in a manner that protects the environment and the health and safety of all Rohm and Haas employees and the public.

**Best Practices :::** Support efforts to continuously improve and share best practices within Rohm and Haas and within our industry.

**Transparency and Openness :::** Communicate timely, openly and efficiently on environmental protection, and health and safety issues within the global community.

**Community and Historic Site Stewardship :::** Respect and maintain the values and historical significance of communities and cultures where we operate, and seek and incorporate public input regarding the products we provide.

The Rohm and Haas Electronic Materials business is working towards integrating our Corporate Sustainable Development Principle into our business processes.

The principle states:

"We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs. We will integrate economic growth, environmental protection and social responsibility as important considerations into business decisions."

## **SD Projects in Our Business**

Over the past several years, Rohm and Haas Electronic Materials has made excellent progress on our path toward sustainable development. We recognize this is a continually evolving program and one that will keep our business profitable in the years to come. Listed below are accomplishments made by our business units in the area of sustainable development.

**Microelectronic Technologies:** Our technology staff developed "One-Pot Processing" of functional polymers that allows for the synthesis and isolation of a polymer directly into a resist solvent instead of producing the polymer through a multi-step process. The One-Pot Process significantly reduces waste generation, uses less hazardous solvents, and lowers raw material and operational costs due to a reduction in processing steps.

**Packaging and Finishing Technologies (PFT):** The PFT business has undertaken many development programs for greener products including: lead-free solderable finishes; less hazardous, and biodegradable electrolytes (methanesulfonic acid); cyanide-free electrolytes for gold plating; and chrome-free, aqueous processes for plating on plastics.

**Circuit Board Technologies (CBT):** Our next generation imaging resist eliminated two Hazardous Air Pollutants (HAPs), and provided better overall performance to our customers. We also eliminated all CBT products containing mercury from our portfolio in the North American Region.

Our CBT technology group in the UK has been very active in joint projects with UK and EU agencies in developing many pollution prevention "best practices" for the industry we serve. The projects include plastic drum recycling, waste water treatment techniques and the published guide, "The Printed Circuit Board Industry, An Environmental Best Practice Guide."



## **ELECTRONIC MATERIALS**



**Circuit Board Technologies**



**CMP Technologies**



**Microelectronic Technologies**



**Packaging and Finishing Technologies**

For locations and information please visit; <http://electronicmaterials.rohmhaas.com>

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